

PATENT  
Atty. Dkt. No. ATT/2002-0457

**IN THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-5 (Canceled).

6. (Previously Presented) A method for providing a data management system, comprising:
- preprocessing a database having a relation to produce an index, wherein said preprocessing step comprises:
    - identifying a dominating vector of constants,  $\bar{c}$ , for a given n-dimensional vector of constants  $\bar{c}$ ;
    - receiving a query having aggregation constraints;
    - applying said index to look up a result in response to said query having aggregation constraints; and
    - providing said result.
7. (Original) The method of claim 6, wherein said preprocessing step further comprises:
- obtaining a partition defined by said vector  $\bar{c}$  and said vector  $\bar{c}'$ .
8. (Original) The method of claim 7, wherein said partition is expressed as a hyper rectangle.
9. (Original) The method of claim 7, wherein said preprocessing step further comprises:
- inserting said partition into a multidimensional data structure.
10. (Original) The method of claim 9, wherein said multidimensional data structure is an R-Tree.

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Claims 11-24 (Canceled).